

SNOW FLEAS (*Hypogastrura nivicola*)



IT'S ALL IN THE NAME

Snow fleas are part of the springtail family. They earned their snow flea moniker by cavorting on the snow on warm winter days. With their darker colors, they appear as flecks of pepper or ash on the snow surface. They are roughly the size of this letter "s."

PASS THE BACTERIA

Snow fleas live in damp environs, like soil, mosses or leaf litter. Snow fleas are decomposers, feeding on decaying organic matter, bacteria, fungi, algae, pollen, roundworms and rotifers.

JUST ADD WATER

Some are known to dry up completely to reconstitute when wet, likely to aid in drought survival.

TREAD LIGHTLY, LEST YOU FLATTEN THE FLEA

The snow flea is a member of the order Collembola, of which there are more than 6,000 species spanning every continent, including Antarctica. Some experts believe it is the most abundant insect-like species. Estimates have as many as 3 trillion snow fleas per acre of forest ground.

HOLY HOPSCOTCH, BATMAN

At the end of their abdomens, springtails have a furcal, a spring-like tail held in place by hooks. When a quick escape is warranted, the furcal is released, catapulting them three to four inches in the air—roughly the equivalent of a human leaping a 12-story building.

WE DON'T MAKE IT, WE MAKE IT BETTER

An antifreeze protein found in snow fleas has scientists believing transplant organs may one day enjoy longer shelf lives, saving human lives.

Researchers at Queen's University in Ontario, say the protein, which allows snow fleas to operate in sub-zero environments, could prevent ice crystal formation in tissues, allowing organ storage at lower temps for longer periods. Other research by food chemists at the University of Wisconsin-Madison of the protein may improve the texture and storage of ice cream.

LONG LIVE THE SNOW FLEA

With the exception of a species in Australia, snow fleas aren't known to feed on crops. They don't damage houses. They don't bite. Unlike every other major group of arthropods, springtails never evolved to parasitism. Apparently, they've had little incentive to change, as every springtail found trapped in amber 45 million years ago exist today.